

AMENDMENTS TO THE CLAIMS

1. **(Previously Presented)** An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising pulsing into a chamber containing a surface comprising a material selected from W, Ta, Cu, Ni, Co, Fe, Mn, Cr, V, Nb, tungsten nitride, tantalum nitride, titanium nitride, dielectrics, and activated dielectrics a reducing gas selected from glyoxylic acid and imidazole at a temperature ranging from $>60^{\circ}\text{C}$ to $<260^{\circ}\text{C}$ so as to form a layer on the surface, wherein the layer comprises the metal.
2. **(Previously Presented)** An ALD process according to claim 1, wherein the reducing gas is glyoxylic acid.
- 3.-4. **(Cancelled)**
5. **(Currently Amended)** An ALD process according to claim ~~1~~³ wherein the surface is a pretreated metallic surface selected from W, Ta, tungsten nitride, tantalum nitride, and titanium nitride.
6. **(Currently Amended)** An ALD process according to claim ~~1~~³ wherein the surface is a metal selected from Cu, Ni, Co, Fe, Mn, Cr, V and Nb.
7. **(Previously Presented)** An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising

providing a surface comprising a material selected from noble metals, W, Ta, Cu, Ni, Co, Fe, Mn, Cr, V Nb, tungsten nitride, tantalum nitride, titanium nitride, dielectrics and activated dielectrics in a reaction chamber at a temperature ranging from $>60^{\circ}\text{C}$ to $<260^{\circ}\text{C}$;

pulsing a precursor for the metal into the chamber; and

pulsing into the chamber a reducing gas selected from glyoxylic acid and imidazole.

8. **(Original)** An ALD process according to claim 7 wherein the reducing gas is glyoxylic acid.
9. **(Previously Presented)** An ALD process according to claim 7 wherein the activated dielectric surface comprises at least one of thiol, sulfide, tetrasulfide, phosphine, phosphide or amine groups.
10. **(Previously Presented)** An ALD process according to claim 7 wherein the activated dielectric surface comprises thiol groups.
11. **(Previously Presented)** An ALD process according to claim 7 wherein the dielectric is selected from CVD polymers, organic-inorganic hybrids, and silicon or metals having an oxide-terminated surface.
12. **(Previously Presented)** An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising
- providing a substrate in a reaction chamber;
- pulsing a precursor for the metal into the chamber at a temperature ranging from >60°C to <260°C; and
- pulsing glyoxylic acid into the chamber.
13. **(Previously Presented)** An ALD process according to claim 12, wherein the precursor is a metal β -diketonate compound.
14. **(Previously Presented)** An ALD process according to claim 12, wherein the precursor is a metal-hfac compound.
15. **(Previously Presented)** An ALD process according to claim 12, wherein the precursor is selected from Pd(hfac)₂, Ru(hfac)₂, Rh(hfac)₂, Pt(hfac)₂, Ir(hfac)₂, Ir(acac)₂, Pd(tmhd)₂, Ru(tmhd)₂, Rh(tmhd)₂, Pt(tmhd)₂, and Ir(tmhd)₂.
16. **(Previously Presented)** An ALD process according to claim 12, wherein the metal is Pd.

17. **(Previously Presented)** An ALD process according to claim 12, wherein the precursor is $\text{Pd}(\text{hfac})_2$.